DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-003256 Address: 333 Burma Road **Date Inspected:** 16-Jul-2008

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Keng Chan No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower

Summary of Items Observed:

On this date, Caltrans Office of Structure Materials (OSM) Quality Assurance Inspector (QA) Raymond Lara was present at jobsite in Zhenhua Port Machinery Company facility on Changxing island, China for the purpose of observing and monitoring the fabrication of the SAS Superstructure.

Bay 1

The Quality Assurance Inspector observed ZPMC utilizing a milling machine in the beveling process on longitudinal stiffener P1107.

The Quality Assurance Inspector observed ZPMC utilizing chalk layout lines in an effort to aid in the fit up on longitudinal stiffener to skin plate E South Tower Assembly.

Skin Plate A South Tower Assembly

The Quality Assurance Inspector observed ZPMC repairing base metal damage by grinding on various longitudinal stiffeners. The Quality Assurance Inspector measured the depth on several of the areas that were being repaired by ZPMC. The depth of the area measured by the Quality Assurance Inspector were less than 3mm. The items observed by the Quality Assurance Inspector appeared to meet contract requirements.

Bay 2

The Quality Assurance Inspector observed ZPMC utilizing a milling machine in the beveling process on skin plate D East Tower Assembly.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

The Quality Assurance Inspector observed ZPMC personnel performing heat straightening on longitudinal stiffener P1330.

The Quality Assurance Inspector observed ZPMC personnel in process of performing thermal cutting on diaphragm plate P414.

ESDI-SA49-A/D 17A

The Quality Assurance Inspector observed ZPMC welder 040775, utilizing the flux cored arc welding process on a complete joint penetration in the flat position on longitudinal stiffener weld number ESDI-SA49-A/D 17A. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-T-2231-B-U3-F.

The Quality Assurance Inspector observed ZPMC preparing the bevel angle on longitudinal stiffener weld ESDI-SA49 A/D 6A by grinding.

Skin Plate A East Tower Assembly

The Quality Assurance Inspector observed ZPMC Caltrans approved welders 040611,048532, 040614, and 541271 utilizing shielded metal arc welding process tack welding longitudinal stiffeners plate to skin plate A East Tower Assembly. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-P-2312-TC-PS.

The Quality Assurance Inspector observed ZPMC personnel in process of perform a survey of skin plate E East Tower Assembly.

Bay 3

The Quality Assurance Inspector observed ZPMC grinding and performing flux core arc welding (FCAW) on visual weld repairs on Orthotropic Box Girder (OBG)DP-0830-001.

The Quality Assurance Inspector observed ZMPC Quality Control Inspector performing visual inspection on completed weld repairs. Prior to releasing Orthotropic Box Girder (OBG)DP-076-4BW to Caltrans for the final visual inspection.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)





Summary of Conversations:

No relevant conversations on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua Ishibashi, (707) 649-5453, who represents the Office of Structural Materials for your project.

Inspected By:	Lara,Raymond	Quality Assurance Inspector
Reviewed By:	Lanz,Joe	QA Reviewer